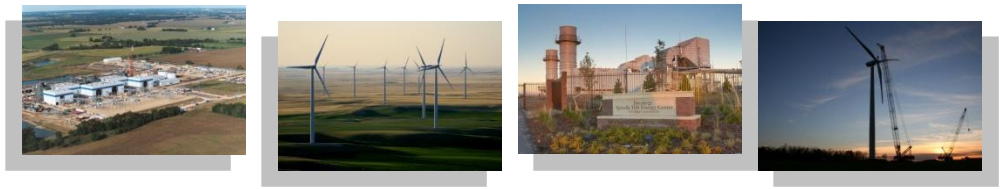
Invenergy



Development Overview
Indiana Wind Development at the Crossroads

Dan Thompson
Vice President, Energy Marketing

Windiana
Indianapolis, IN July 21, 2010

Corporate Overview

- Developer, owner and operator of large-scale wind energy and natural gas-fueled power projects.
- Headquartered in Chicago
  - Development offices in Austin; Denver; San Diego; San Francisco; Washington, D.C.; Toronto; Scotland and Poland; and Lafayette, IN!
- 350 Employees

Invenergy

One of the 'top 10' wind energy developers in North America based on constructed projects over the last several years.

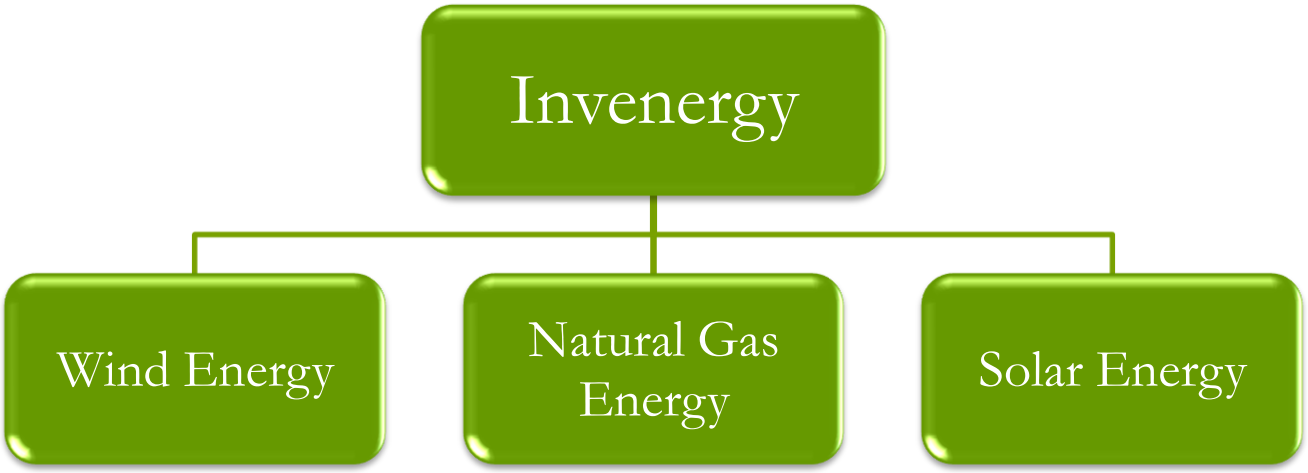
Largest "independent" wind energy developer in the United States (unassociated with a corporate parent).

Development pipeline includes more than 18,000 MW of wind and 5,000 MW of thermal.

Active through North America and in select areas in Canada and Europe.

Invenergy

Primary Company Business Lines



Invenergy Overview

Portfolio of projects - over 5000 MW of capacity

- Invenergy Wind: 27 projects - 3360 MW capacity
- Invenergy Natural Gas Projects: 5 projects - 2210 MW capacity
- Invenergy Solar: 2 projects - 20 MW capacity
- At the end of 2009, Invenergy was the 6th largest owner/operator of wind energy facilities in the United States.

Projects above are in operation, construction, or under long-term contract.

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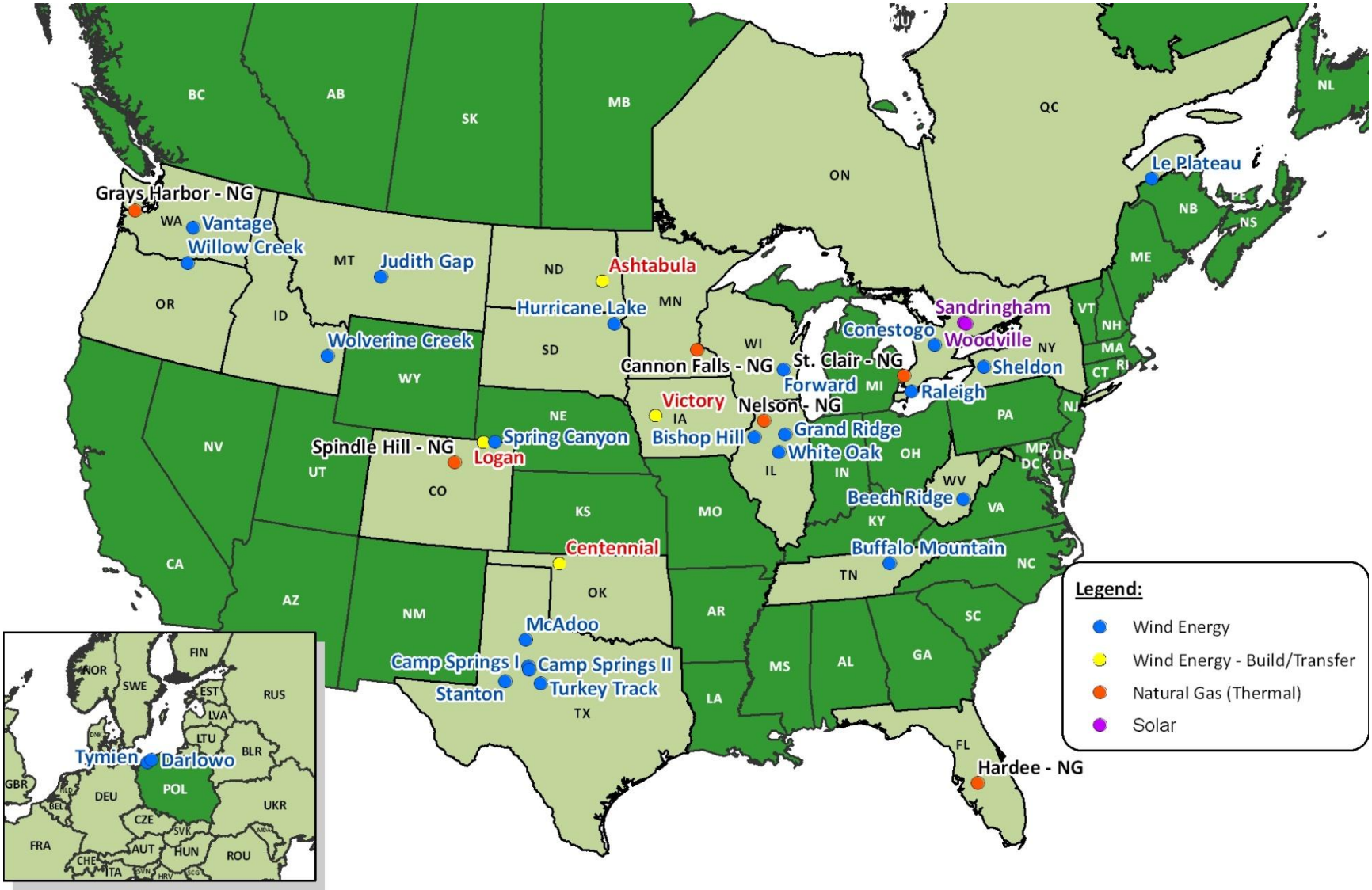
Invenergy Overview

Portfolio Map



Invenergy

Fully Integrated In-House Capabilities

DEVELOPMENT

- Dedicated development team
- In-house wind resource expertise
- Permitting, transmission, and interconnection expertise

ENERGY MARKETING/ FINANCING

- Well-structured long-term power purchase agreements
- Extensive project finance expertise

ENGINEERING/ CONSTRUCTION

- Dedicated engineering team
- Leadership in wind energy project construction

OPERATIONS

- Invenergy Services managing construction and operation of more than 1,500 MW of wind projects

BENEFITS

- Control the value chain
- Shorter development cycle
- Economies of scale
- Minimize execution risk
- Ownership mentality

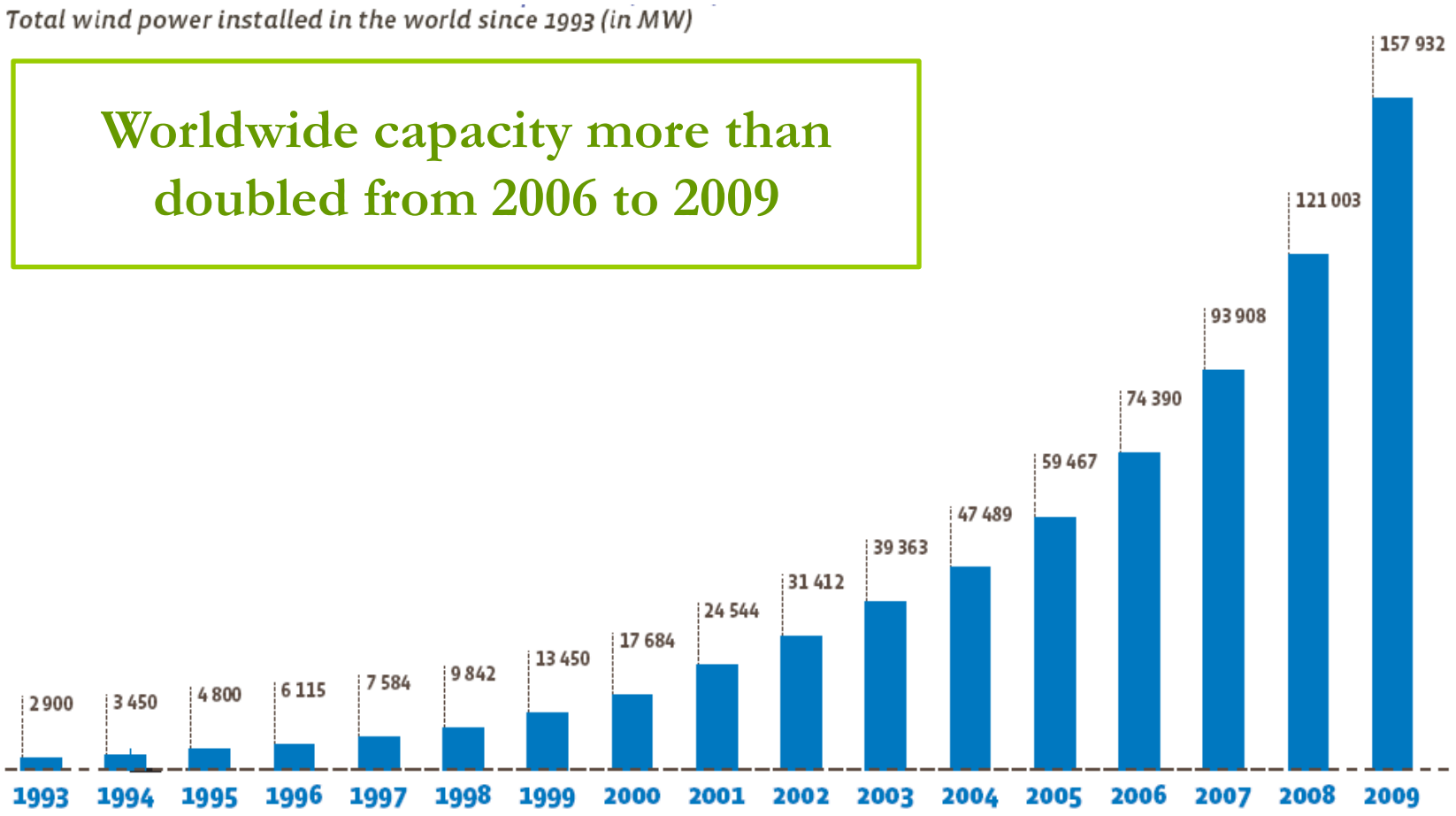
Invenergy Indiana

Key Development State for Invenergy

- Invenergy has been actively developing in Indiana since 2007
- Opened an office in Lafayette in January of 2008
- 2-3 wind projects under active development
- Invenergy has secured over 84,000 acres in Indiana under long-term lease options
- Typical wind project size is ~ 200 MW to take advantage of economies of scale

Invenergy's Lafayette Office

World Wind Capacity Growth as of End of 2009



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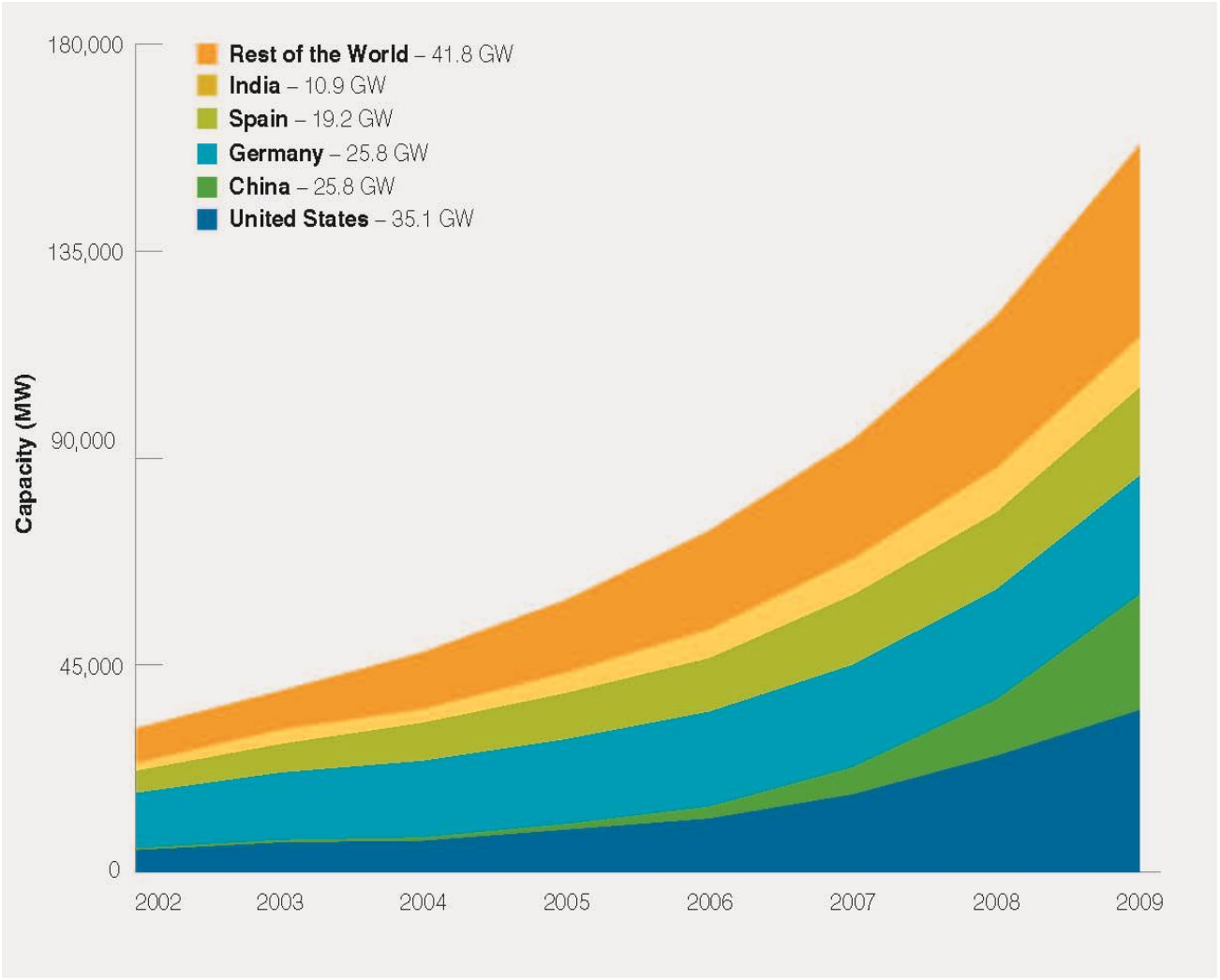
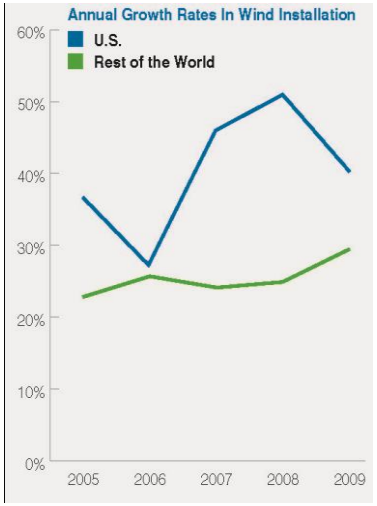
World Wind Capacity Growth as of End of 2009

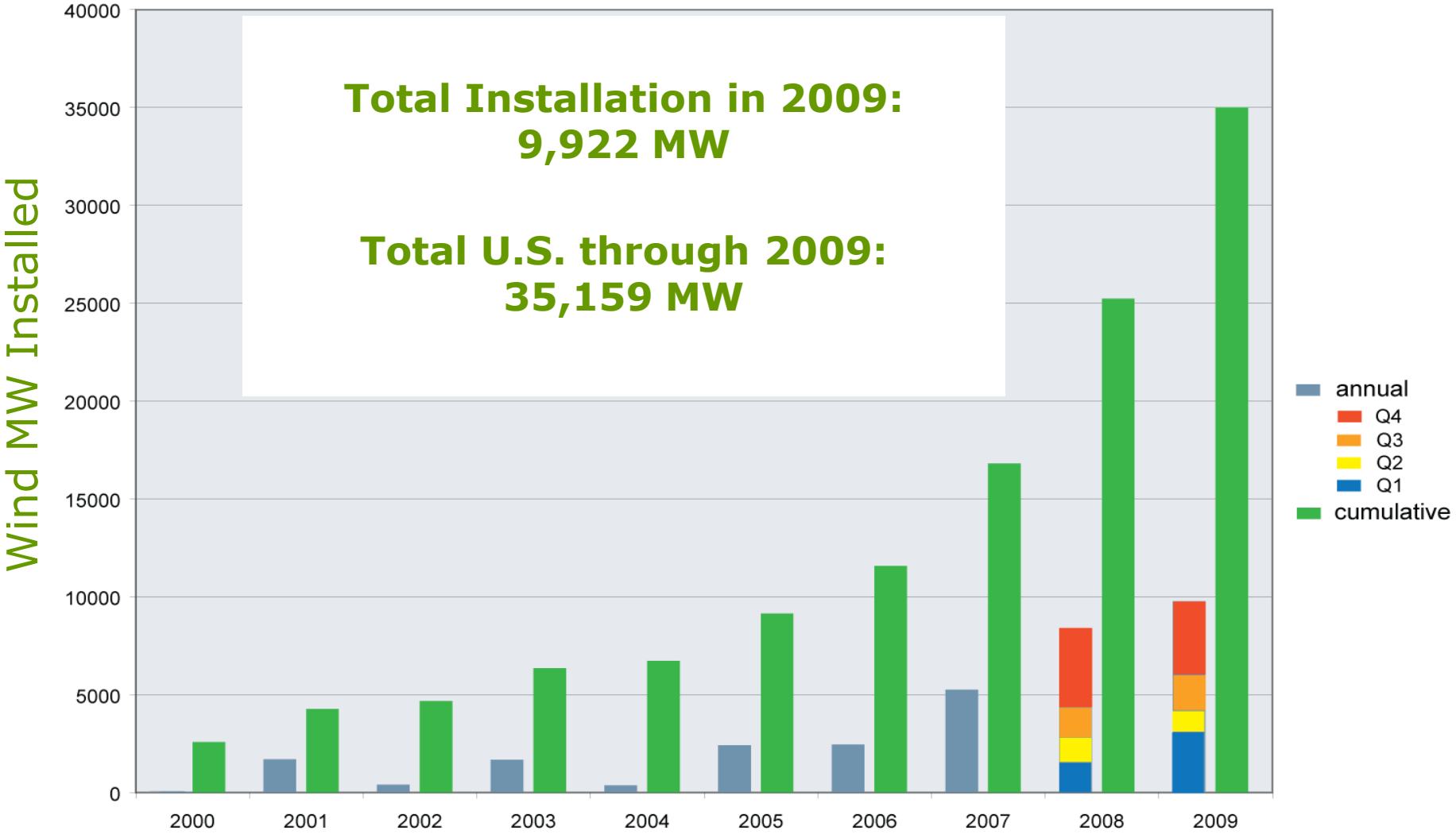




Source: AWEA, GWEC

Source: 2009 AWEA Annual Wind Industry Report

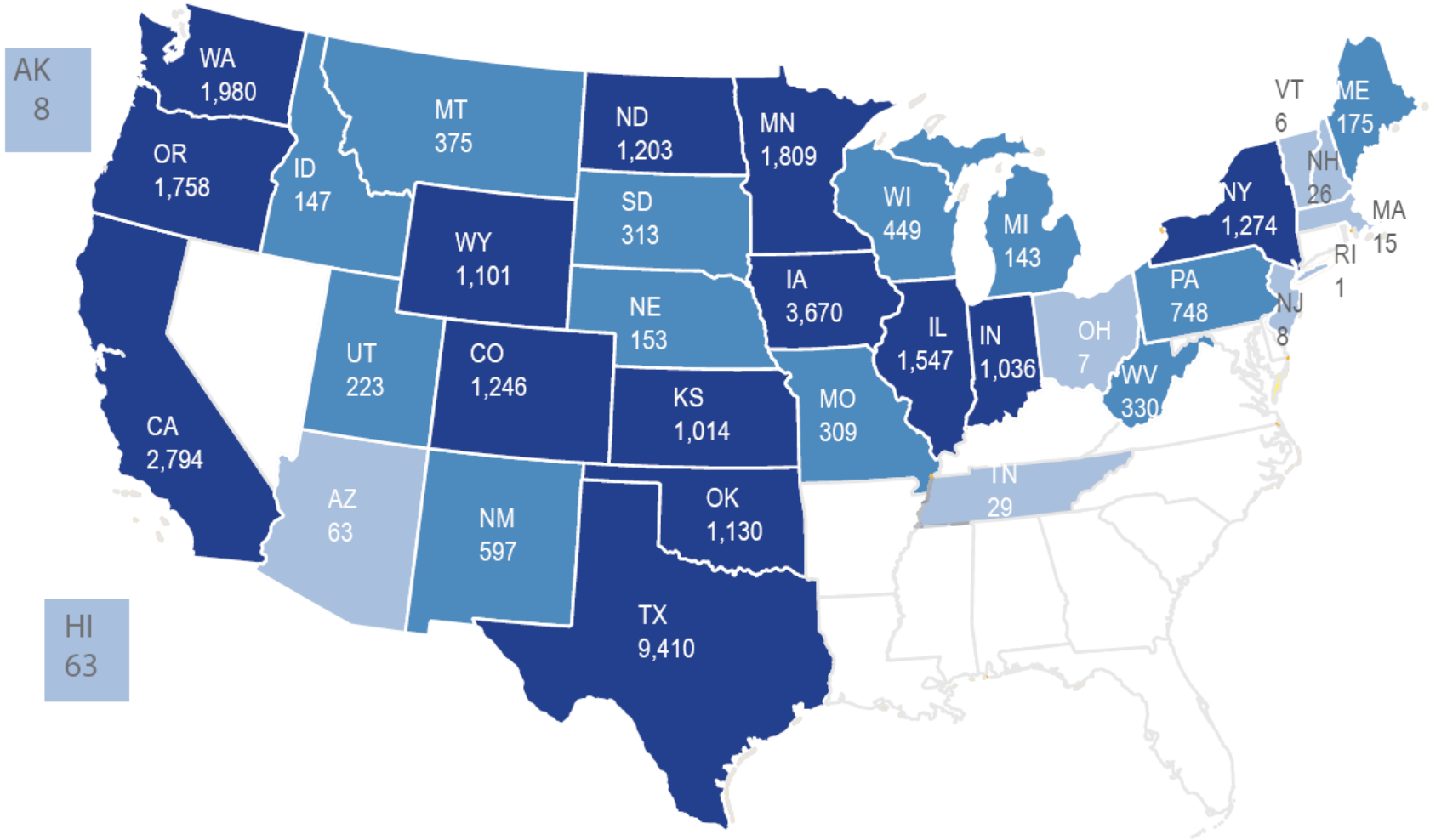
U.S. Wind Industry: 2009



Invenergy

Source: American Wind Energy Association

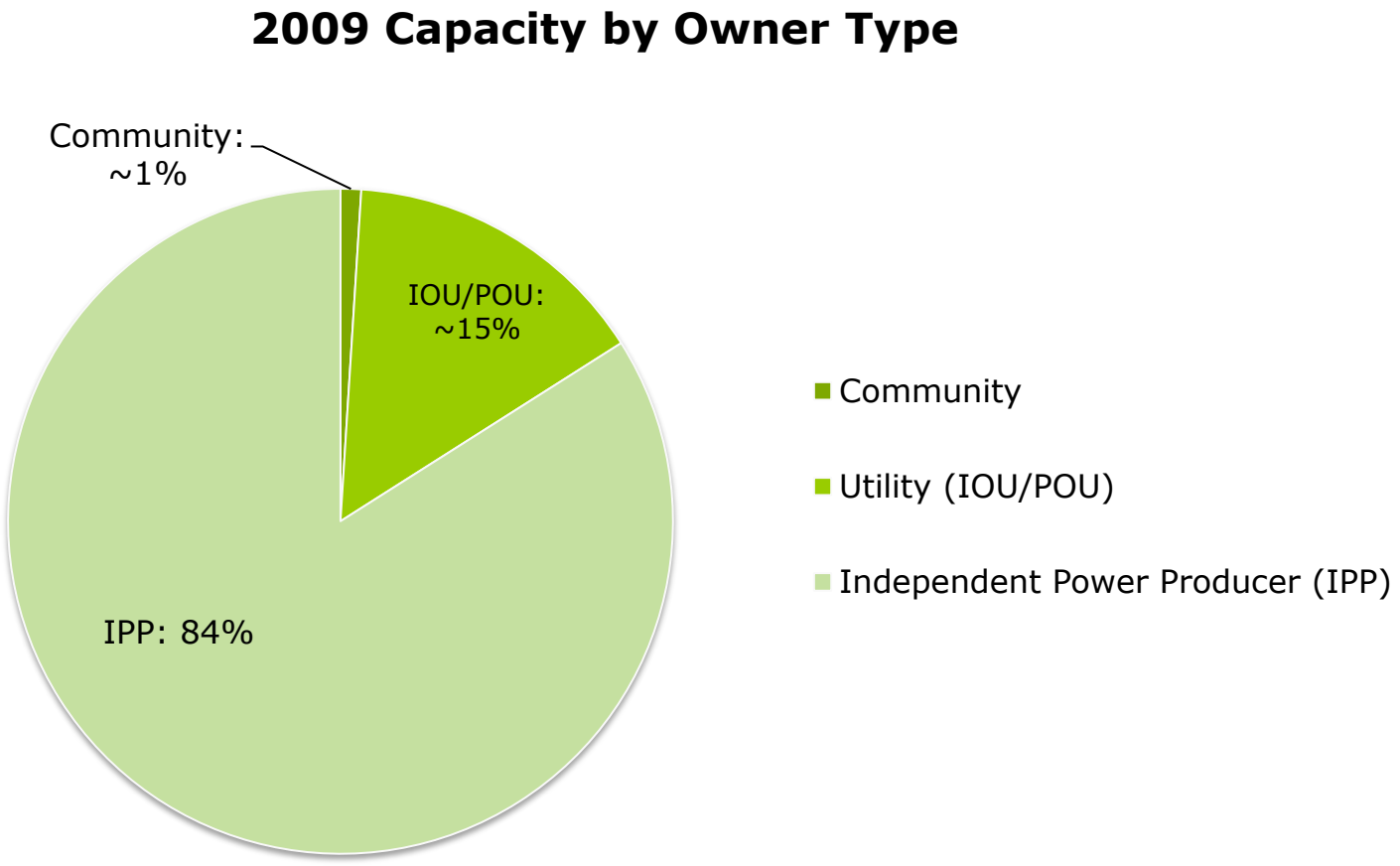
State by State Installed Capacity (MW)



Invenergy

Source: American Wind Energy Association

US Wind Farm Ownership



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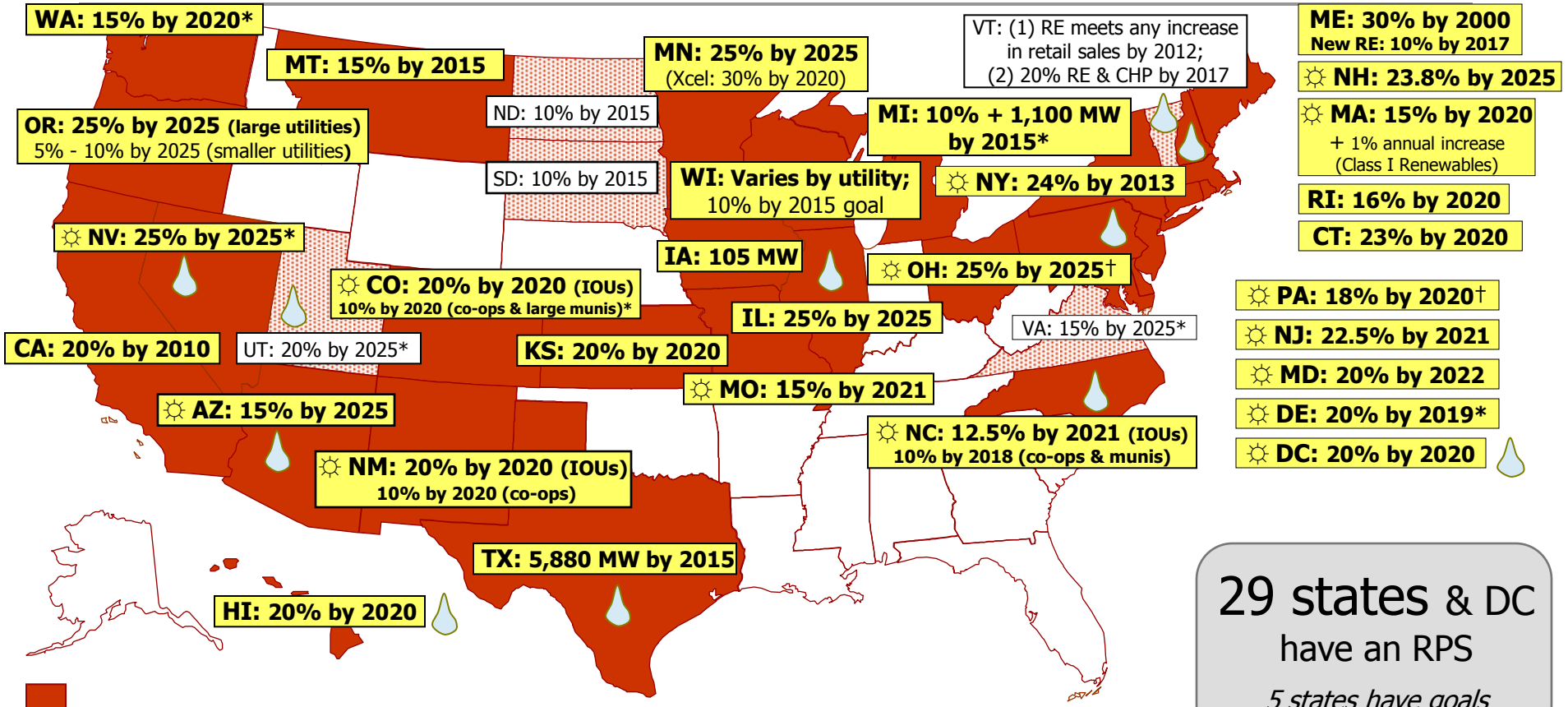
Source: 2009 AWEA Annual Wind Industry Report

Ownership does not include structural investors, which may have a share of equity.

Renewable Production Standards (RPS)



29 states & DC have an RPS

5 states have goals

State renewable portfolio standard

State renewable portfolio goal

Solar water heating eligible

Minimum solar or customer-sited requirement

* Extra credit for solar or customer-sited renewables

† Includes separate tier of non-renewable alternative resources

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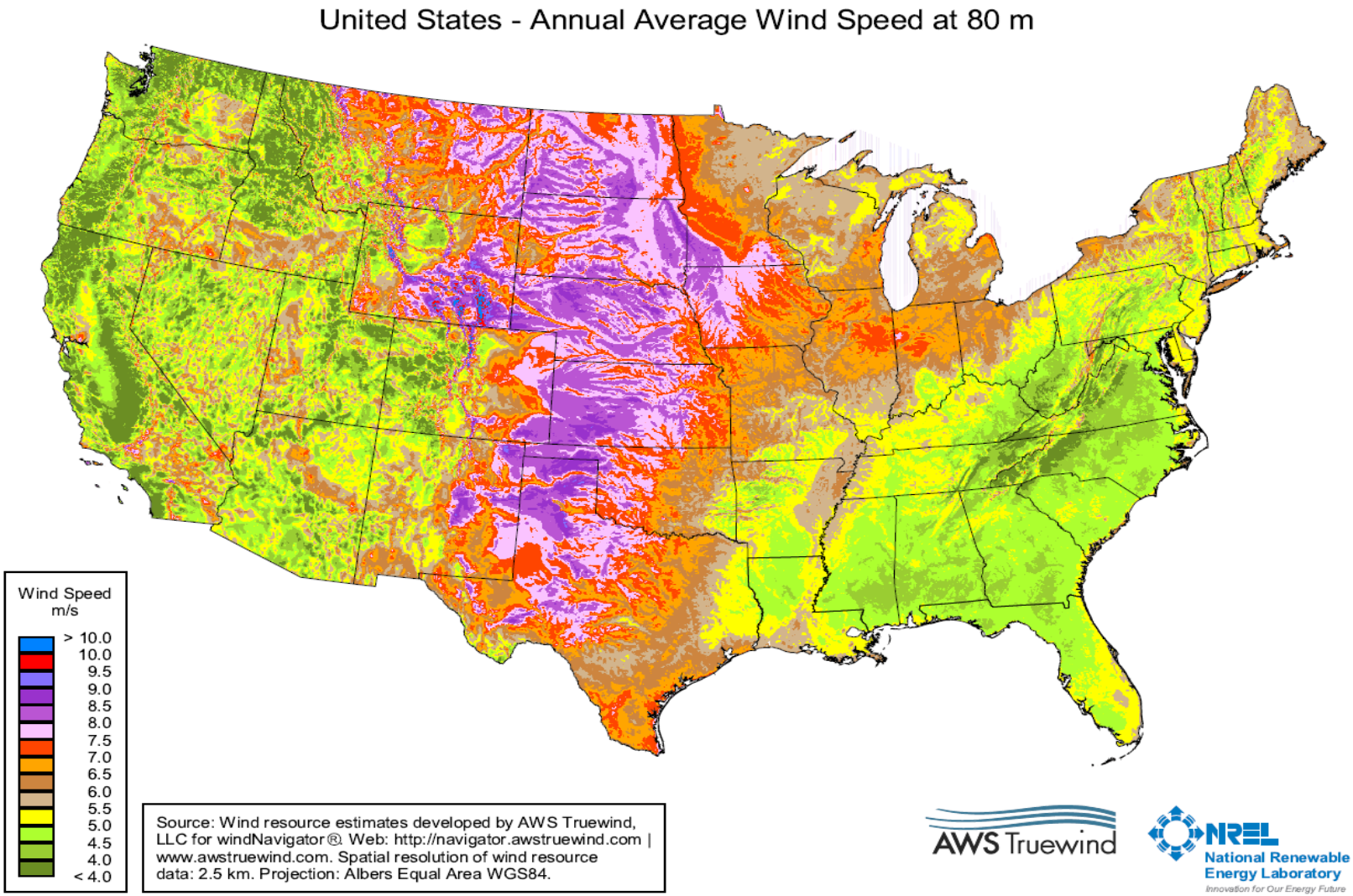
Source: Database of State Incentives for Renewables and Efficiency

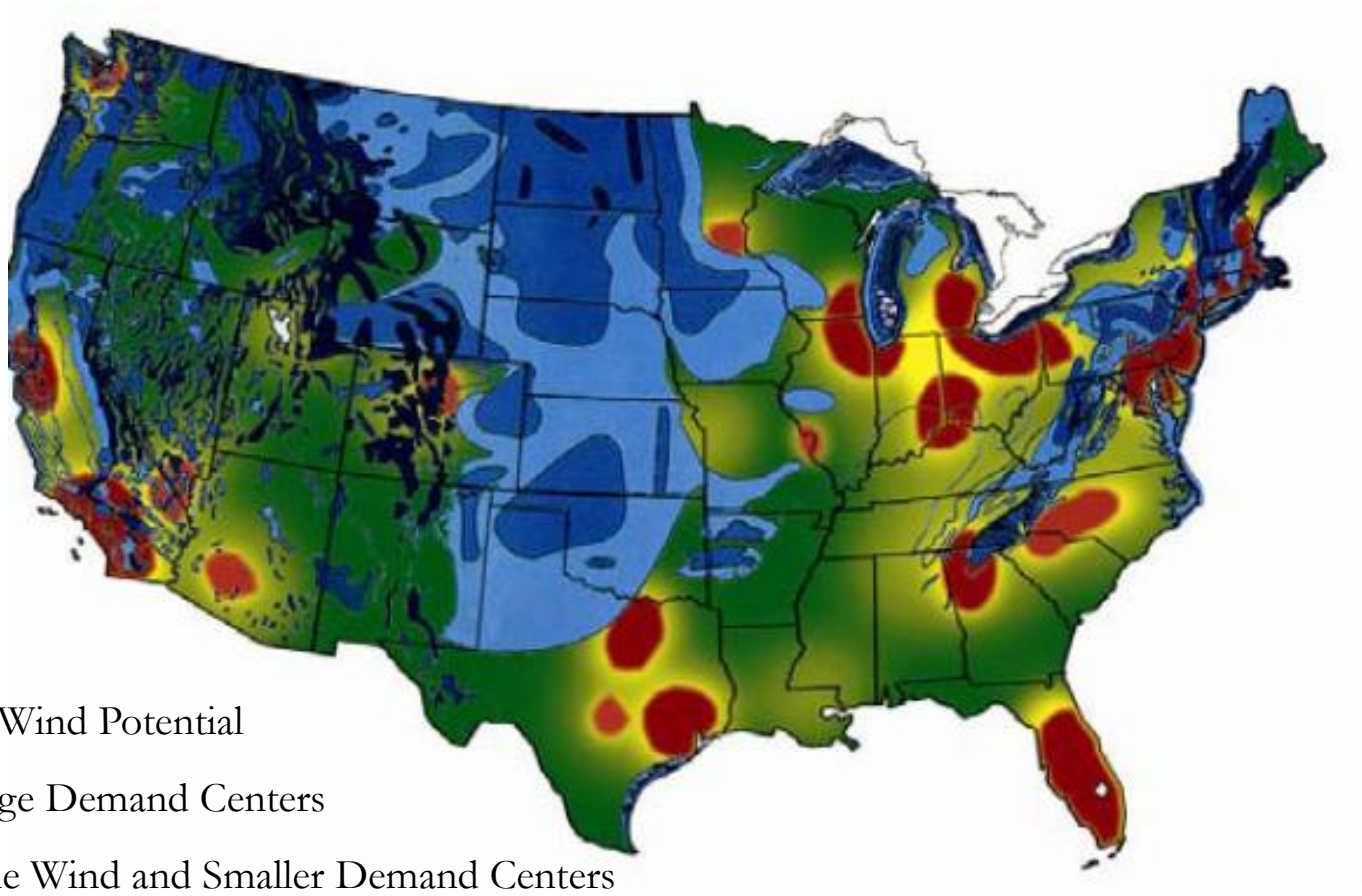
Indiana Wind at the Crossroads

- Crossroads in wind resource: Resource dropping moving eastward across the central US
- Crossroads in the markets: PJM vs. MISO
- Crossroads in enactment of Renewable Portfolio Standard: Federal? State?

Wind Resource Map



Load Centers & Wind Resources



Blue – High Wind Potential

Brown – Large Demand Centers

Green – Little Wind and Smaller Demand Centers

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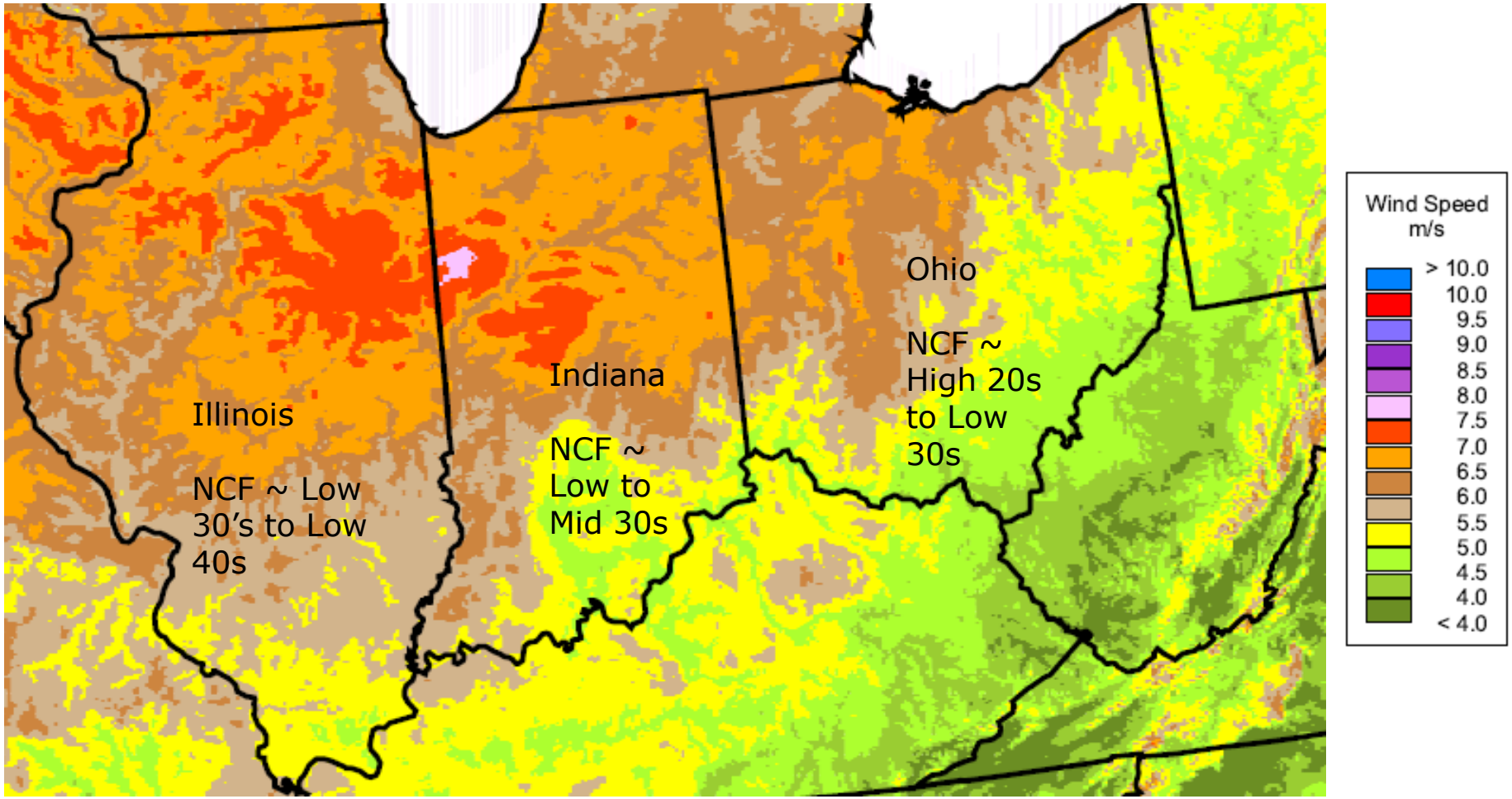
Source: NERC - Accommodating High Levels of Variable Generation Report

Indiana Wind at the Crossroads

Wind Resource, 80 Meters



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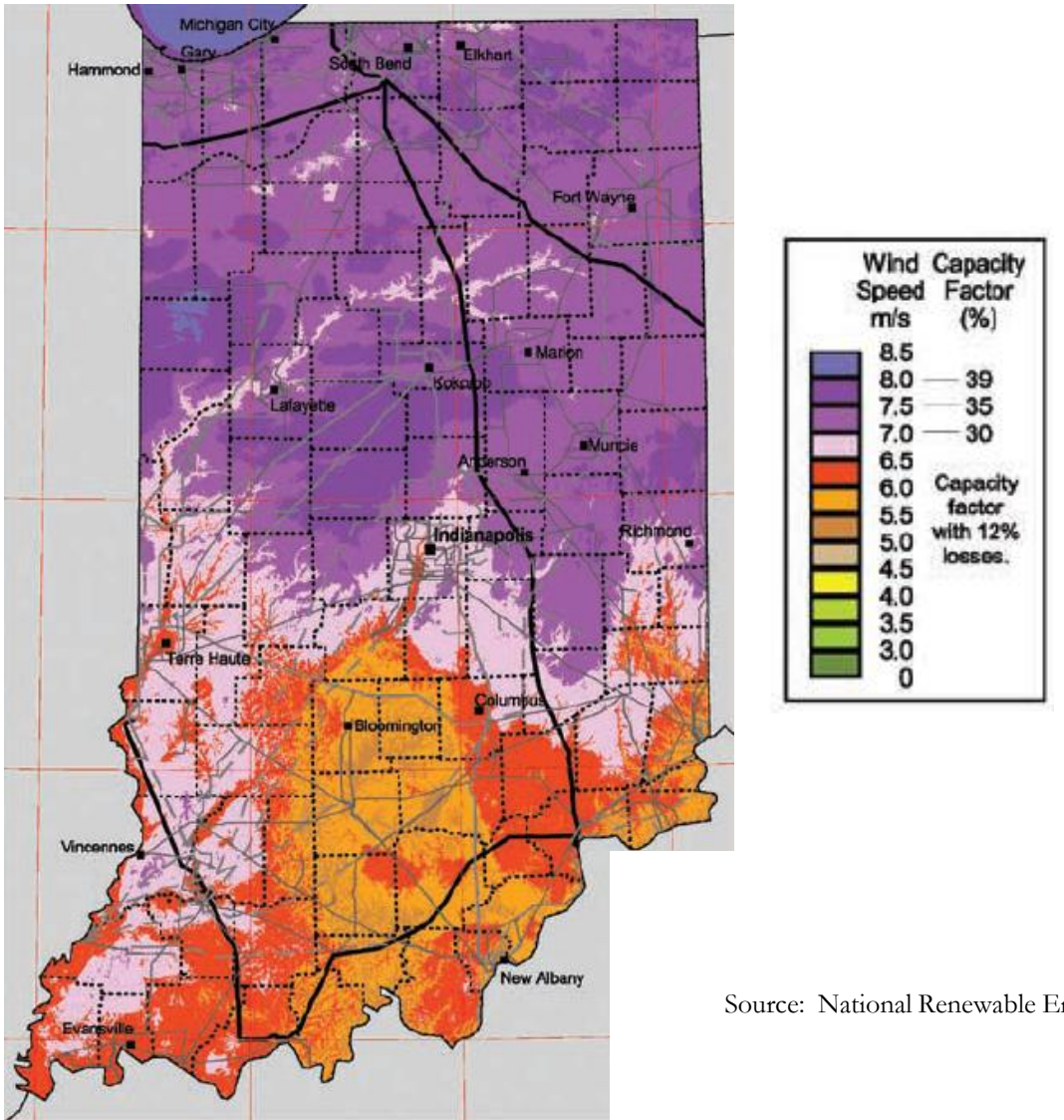
Source: National Renewable Energy Laboratory

Indiana Wind at the Crossroads

Indiana Wind Resource, 100 Meters

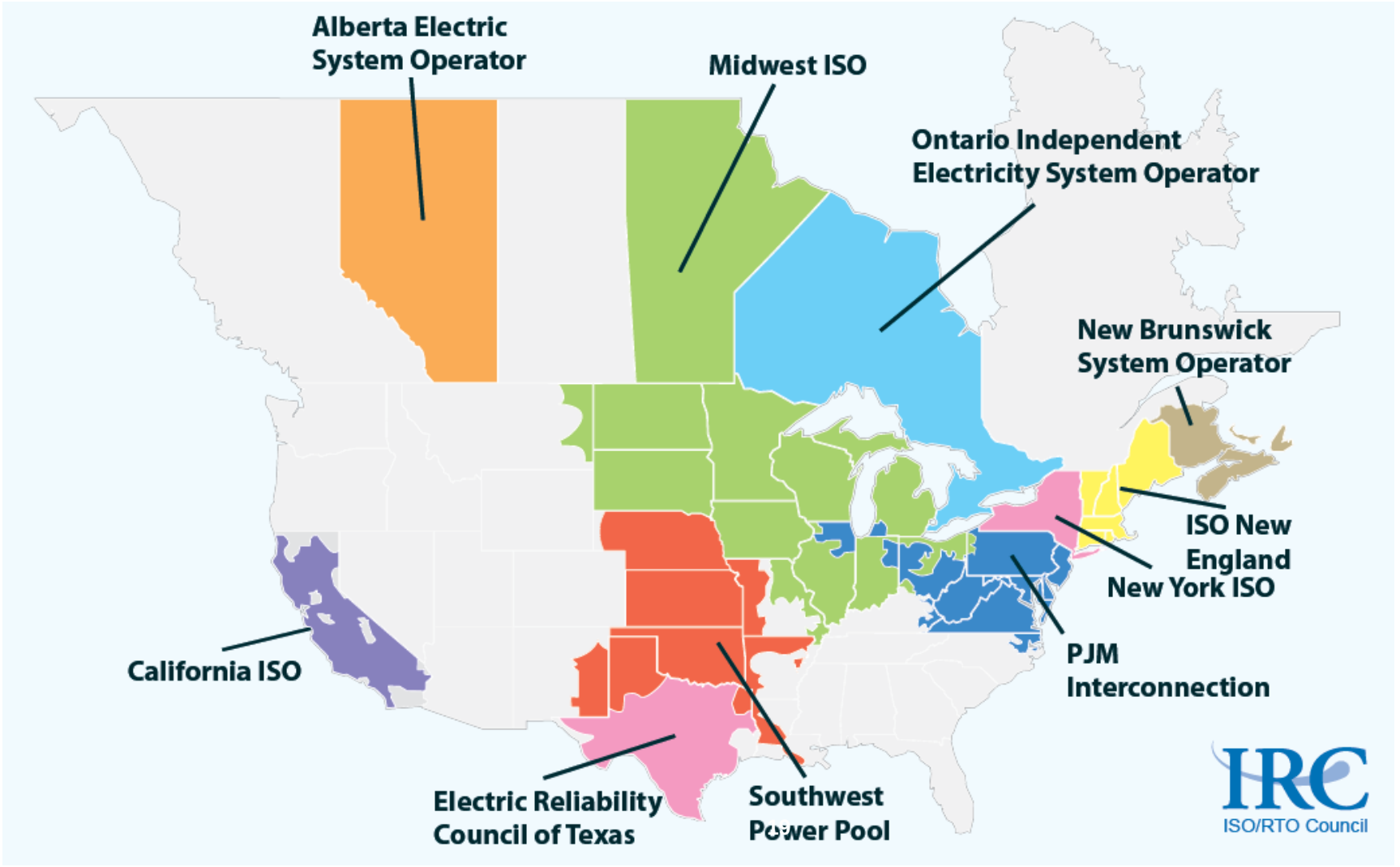


Invenergy

Source: National Renewable Energy Laboratory

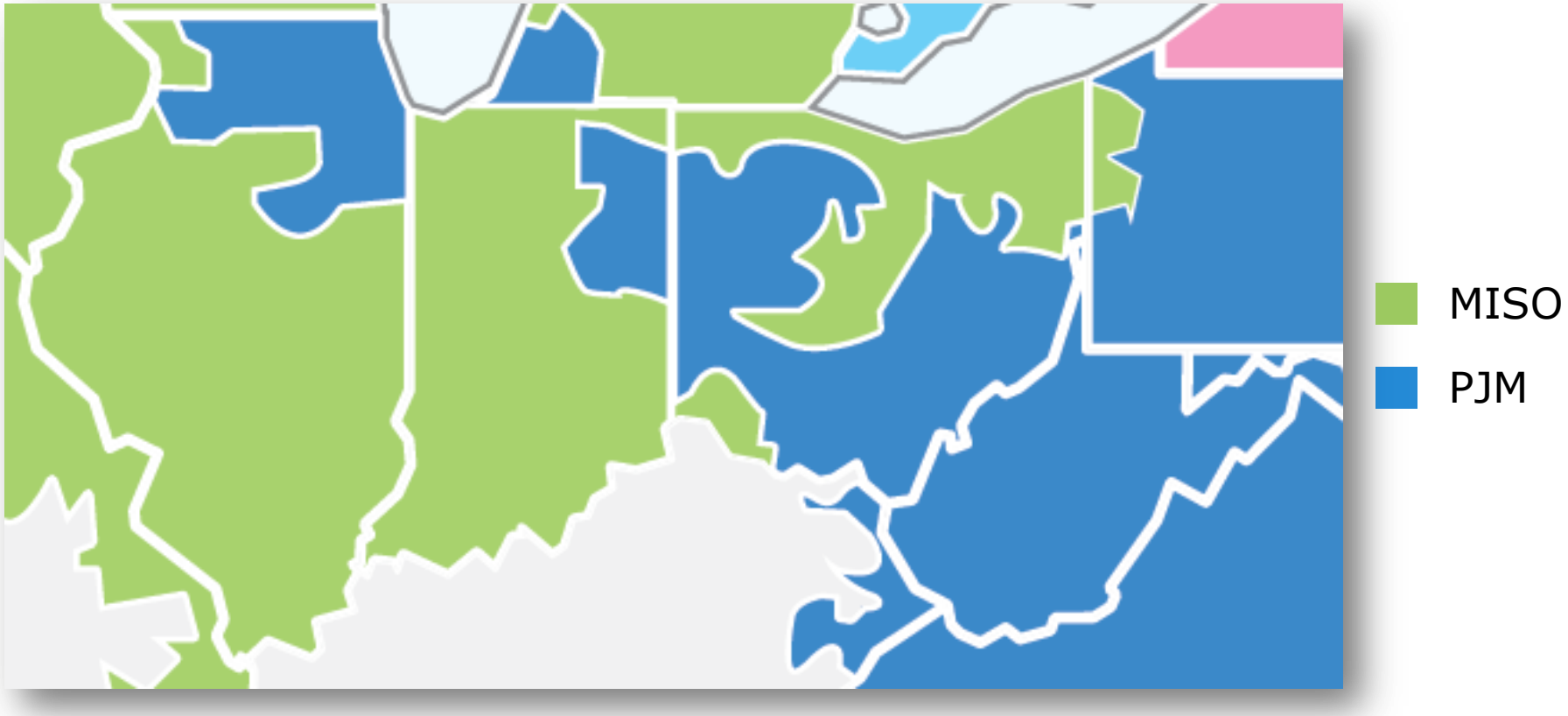
Indiana Wind at the Crossroads

PJM & MISO



Indiana Wind at the Crossroads

PJM & MISO



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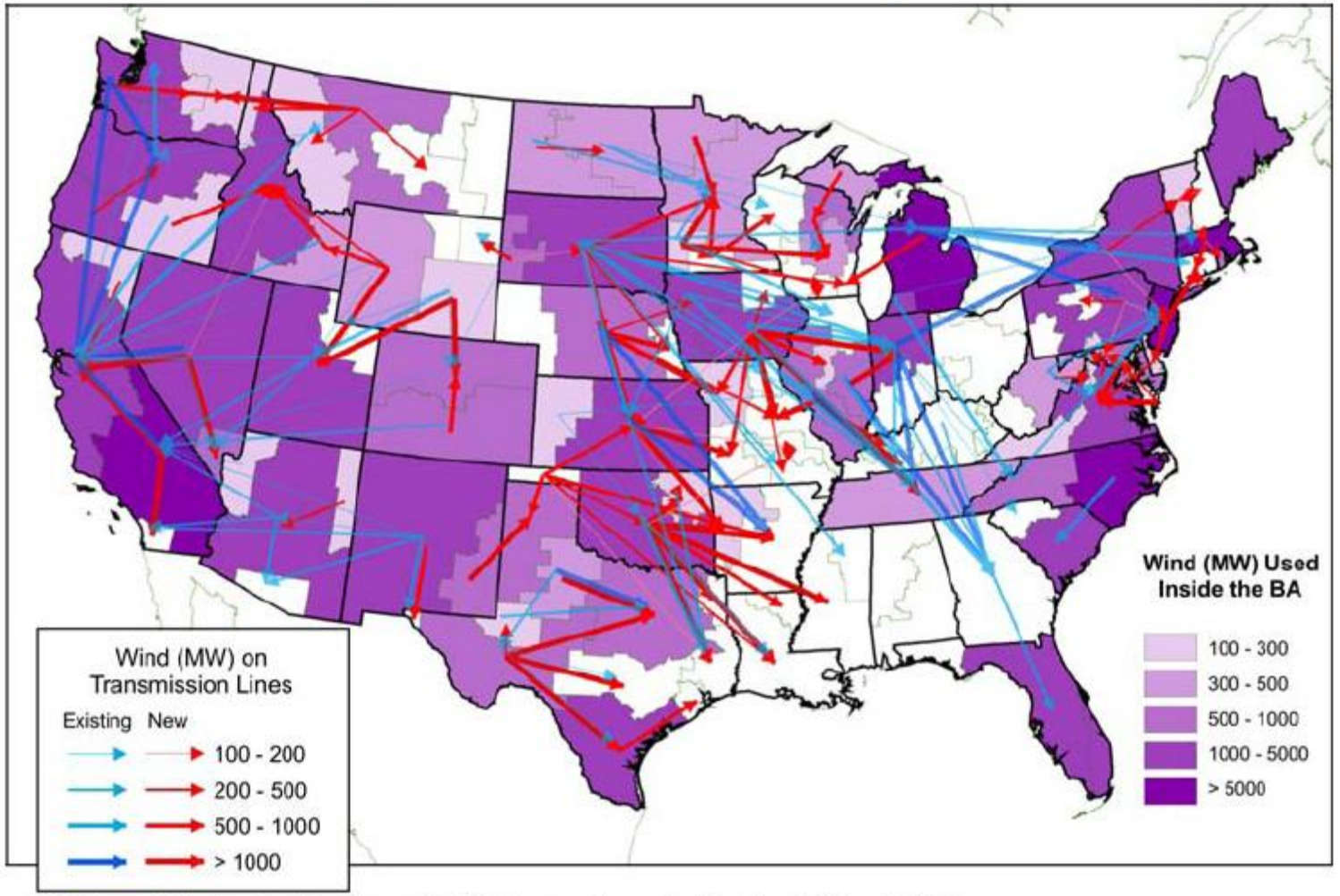
Indiana is a Key Transmission Corridor

Figure 1-9. All new electricity generation including wind energy would require expansion of U.S. transmission by 2030

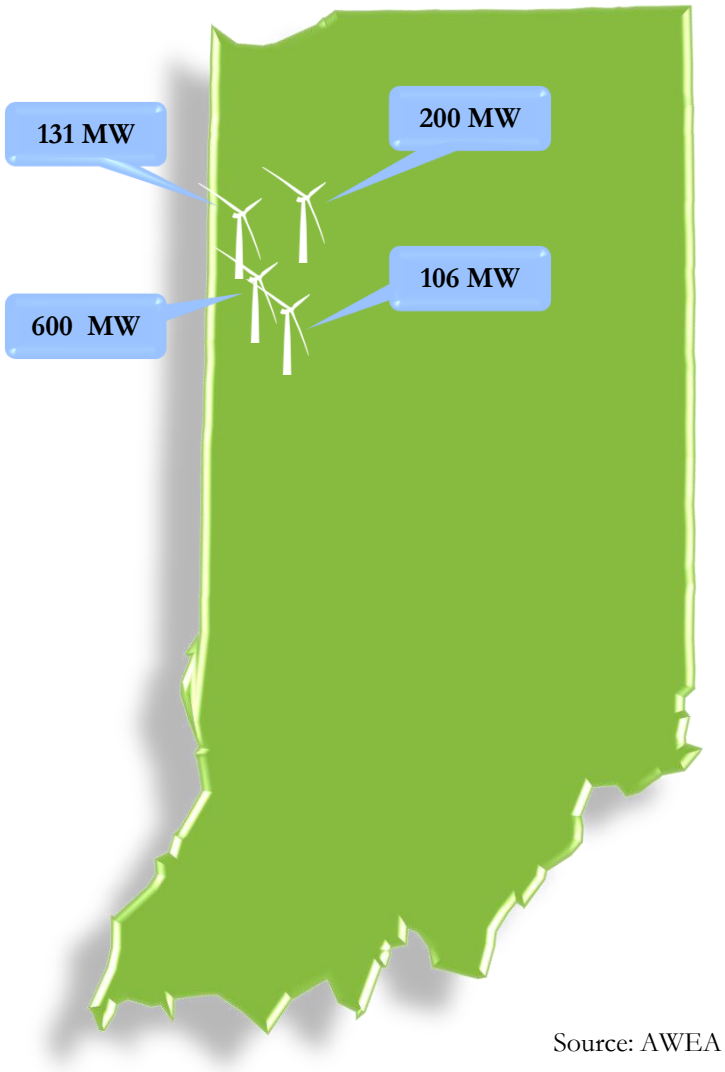


Total Between Balancing Areas Transfer >= 100 MW (all power classes, land-based and offshore) in 2030.
Wind power can be used locally within a Balancing Area (BA), represented by purple shading, or transferred out of the area on new or existing transmission lines, represented by red or blue arrows. Arrows originate and terminate at the centroid of the BA for visualization purposes; they do not represent physical locations of transmission lines.

Indiana Wind Industry Growth

Ranked **2nd** in Capacity Additions in 2009

Year	Wind Capacity Added
2008	130 MW
2009	1,037 MW
2010	99 MW (Under Construction)



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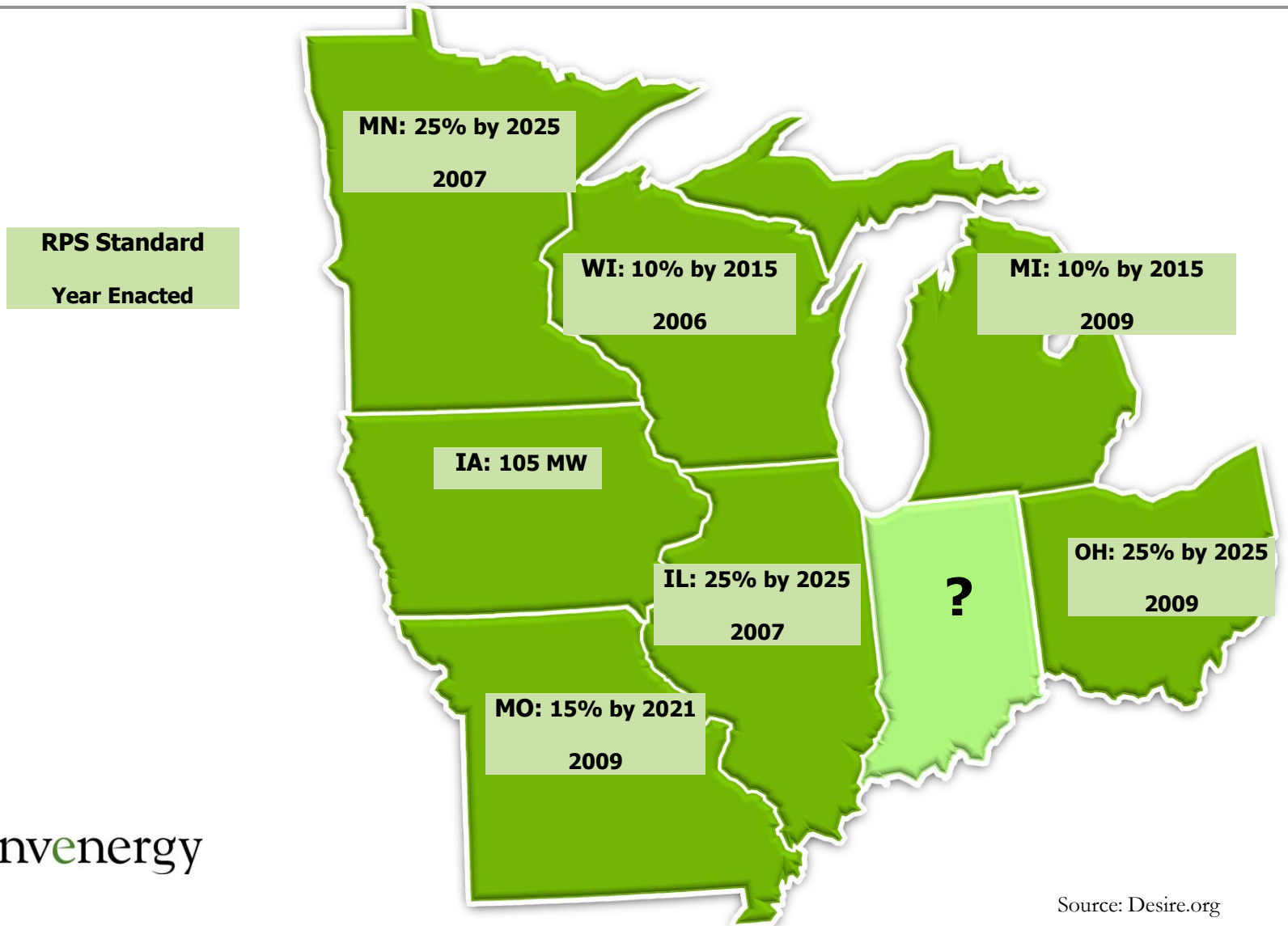
Source: AWEA & NRDC

Indiana Wind Industry Future

State or Federal RPS?



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Source: Desire.org

Indiana Wind Industry Future

Economic Development Benefits of Wind Projects

- According to the Dept. of Energy, a **150 MW** wind project in Indiana would produce:
  - 75 jobs and $86.2 million in local economic activity during its construction phase.
  - Equivalent of 42 full-time local jobs
  - Approximately $2.3 million in property taxes
  - $6.7 million in economic benefit to the local economy each year.
- **30 wind projects** of this size in Indiana would result in thousands of construction/permanent jobs, over **$71 million** in annual property tax revenue and **$200 million** per year in positive economic impact on local communities.

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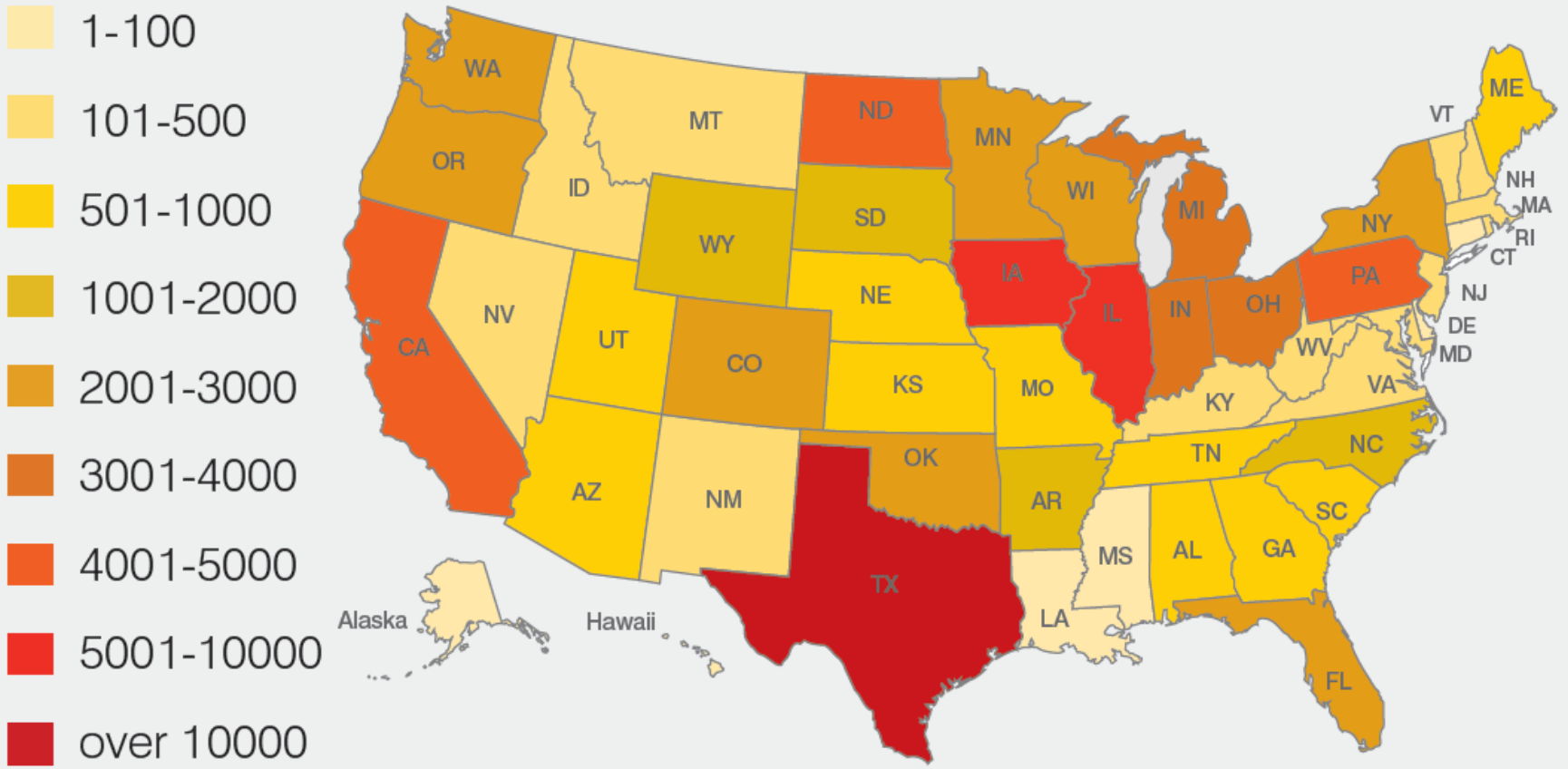
Source: Natural Resources Defense Council

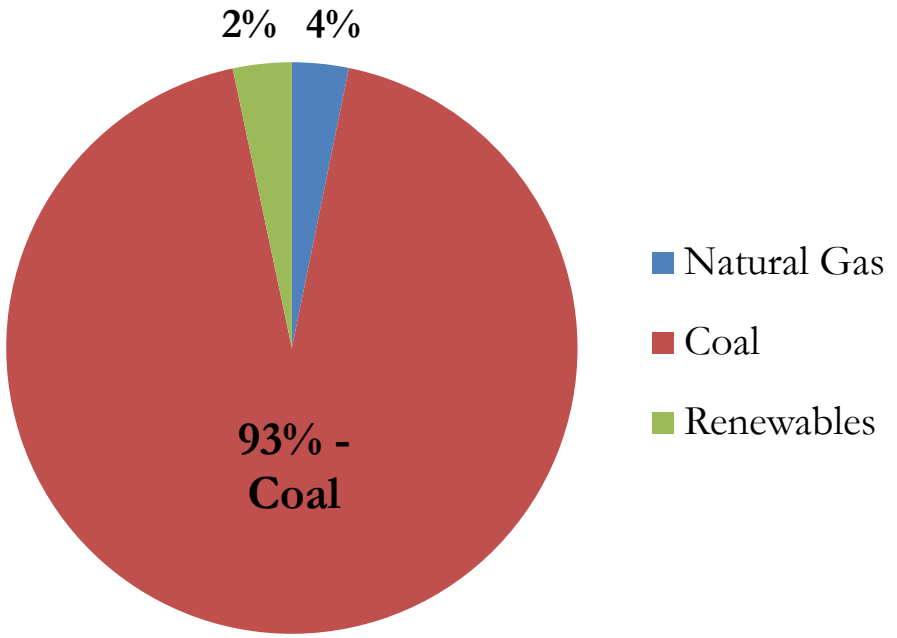
Wind Industry Jobs by State, 2009



Indiana Wind Industry Growth

Current Generation Mix

- Approximately 30,000 MW total installed generation capacity in the Indiana
- Wind adds diversification for a generation sources that is not dependent on fuel cost
- Primary variables are wind resource and capital cost



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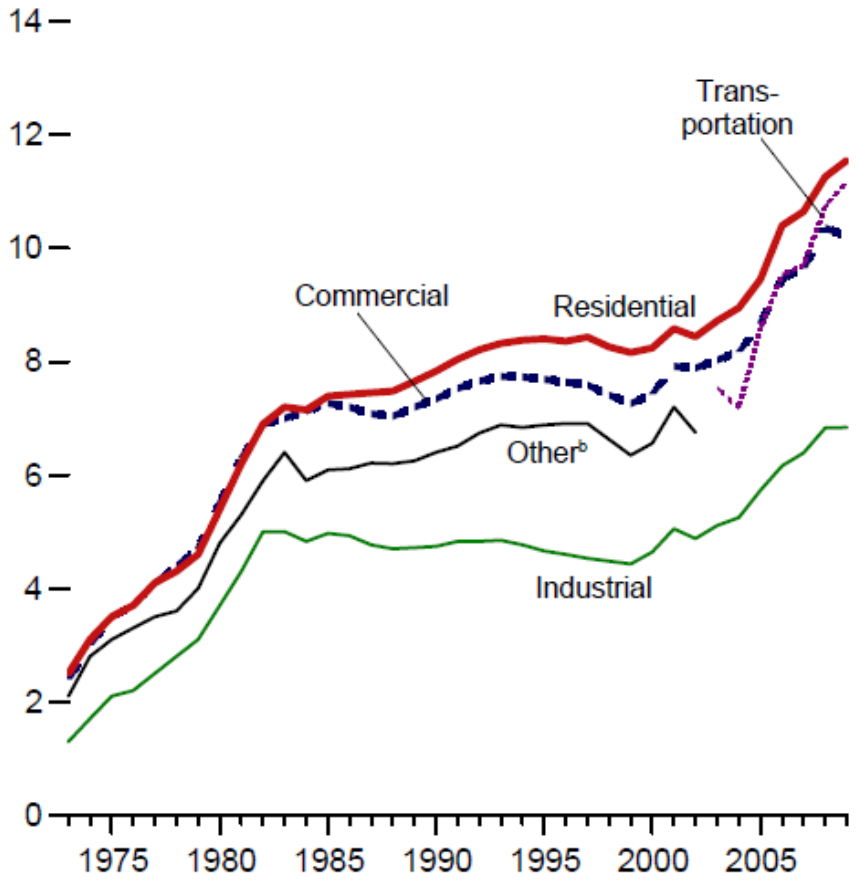
Source: Ventyx, U.S. Energy of Information Administration

Indiana Wind Industry Future

- We are in a long-term rising cost environment
- Recently higher volatility including current low prices

Figure 9.2 Average Retail Prices of Electricity
(Cents[a] per Kilowatthour)

By Sector, 1973-2009



[a]Prices are not adjusted for inflation. See "Nominal Price" in Glossary.
[b]Public street and highway lighting, interdepartmental sales, other sales to public authorities, agricultural and irrigation, and transportation including railroads and railways.

Source: U.S. Energy of Information Administration

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Indiana Wind Industry Future

What is Capacity Potential?

- 44 Indiana counties with commercially viable wind density – that's almost **one-third of the state**.
- What is a reasonable target for wind capacity potential?.....

  30 projects x 150 MW = 4500 MW

  This would equate to ~ 15% wind generation capacity

Indiana Wind Industry Future

Developers Continue to Add New Projects

- PJM and MISO electrical interconnection queue MW additions by year

	PJM Queue	MISO Queue
2006	880 MW	980 MW
2007	1370 MW	1850 MW
2008	1950 MW	2570 MW
2009	2850 MW	1300 MW
2010	100 MW	400 MW

Developers are ready to meet the challenge

Indiana Wind Industry Future

Challenges

- Transmission interconnection
- Environmental and wildlife
- Clear policy

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Indiana Wind Industry Future

Opportunity is Now

- Expiration of Tax Incentives at the end of 2012
- Equipment and construction costs are lower than in recent years
- Projects can still get electric interconnection – for now

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Indiana Wind Industry Future

Conclusion

- Developers are ready to meet the challenge
- Support needed from utilities, state regulators, and other state leaders
- Indiana has potential to play a key role in the Country's wind energy future

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